

# Kundendienstblatt/Service Chart K 62/0-1

Chassis 411

Geräte: METZ belform 115  
METZ belform 110

Baujahr 1962/63

Year of Production 1962/63



TELEVISION · RADIO · PHOTO · FUERTH / BAV.-GERMANY

## Rundfunk-Chassis METZ 411 / METZ-belform 115 + METZ-belform 110 Radio chassis METZ 411 / METZ-belform 115 + METZ-belform 110

	Technische Daten	Technical details (USA version)
Stromart current	Wechselstrom	A/C
Spannung voltage	110/125/160/220/240 Volt	110 Volts
Leistungsaufnahme power consumption	ca. 90 Watt	approx. 90 Watts
Sicherung (Netz) fuse (AC)	0,6 A träge	1,2 amps slow-blow (110 Volts)
Sicherung (Anode) fuse (anode)	0,2 A mittelträge	0,2 amps slow-blow
Skalenlampen dial lamps	2x 7 V 0,3 A	2x 7 V 0,3 amps
Röhrenbestückung valves	ECC 85; ECH 81; EF 85; ECC 83; ECC 83; ECC 83; ELL 80; ELL 80; EM 84; für Multiplexteil*: EC 92, EF 94	6AQ8; 6AJ8; 6BY7; 12AX7; 12AX7; 12AX7; 6HU8; 6HU8; 6FG6; for Multiplex part: 6AB4; 6AU6
Dioden diodes	K 5/5 M; K 5/105; K 5/105	K 5/5 M; K 5/105; K 5/105
Gleichrichter rectifier	B 250 C 250	B 250 C 250
Anzahl der Kreise number of circuits	9 FM-Kreise; 6 AM-Kreise	9 FM-circuits; 6 AM-circuits
Wellenbereiche wave bands	UK 108-88 MHz 2,7-3,4 m MW 1650-510 kHz 182-582 m LW 350-150 kHz 850-2000 m	FM 108-88 Mc/S 2,7-3,4 m short 16-5,9 Mc/S 18,8-51 m BC 1650-510 Kc/S 182-582 m

	Technische Daten	Technical details (USA version)
Eingangsempfindlichkeit sensitivity	UKW: 0,5 $\mu$ V/50 mW / 1 kHz mod. / 12,5 kHz Hub MW: 5...8 $\mu$ V/50 mW { mit 1 kHz, LW: 10 $\mu$ V/50 mW } 30% mod.	FM: 0,5 $\mu$ V/50 mW short: 12...15 $\mu$ V/50 mW } with 1 kc/s BC: 5...8 $\mu$ V/50 mW } 30% mod.
Trennschärfe 1 MHz selectivity 1 Mc/s	schmal 1 : 94 für $\pm$ 9 kHz breit 1 : 23 für $\pm$ 9 kHz	small 1 : 94 for $\pm$ 9 kc/s wide 1 : 23 for $\pm$ 9 kc/s
ZF-Trennschärfe 460 kHz IF-selectivity at 460 kc/s	schmal 1 : 42 für $\pm$ 9 kHz breit 1 : 11 für 9 kHz	small 1 : 42 for $\pm$ 9 kc/s wide 1 : 11 for $\pm$ 9 kc/s
Trennschärfe 98 MHz selectivity at 98 Mc/s	1 : 40 für $\pm$ 300 kHz	1 : 40 for $\pm$ 300 kc/s
ZF-Trennschärfe 10,7 MHz IF-selectivity at 10,7 Mc/s	1 : 35 für $\pm$ 300 kHz	1 : 35 for $\pm$ 300 kc/s
Bandbreite 1 MHz bandwith 1 Mc/s	schmal $\pm$ 2,45 kHz breit $\pm$ 4,00 kHz	small $\pm$ 2,45 kc/s wide $\pm$ 4,00 kc/s
Bandbreite 98 MHz bandwith 98 Mc/s	$\pm$ 85 kHz	$\pm$ 85 kc/s
Zwischenfrequenz intermediate-frequency	AM: 460 kHz FM: 10,7 MHz	AM: 460 kc/s FM: 10,7 Mc/s
Saugkreis suction circuit	460 kHz	460 Kc
Gegenkopplung negative reaction	von sek.-Seite des Ausgangs- übertragers nach Kathode der NF-Verstärkerröhre	from secondary of output transformer to cathode of af amplifier tube
Lautstärkeregelung volume control	physiologisch	physiological
Klangfarbenregelung tone control	Musik/Sprache-Schalter Baß- und Höhenanhebung durch getrennte stufenlose Regler	music/speech switch bass and trebles regulated by separate ridgeless controls
Sprechleistung Output energy	2 x 6 Watt	2 x 6 Watts
Anschluß für 2. Lautsprecher socket for second loudspeaker	niederohmig (4,5...5 Ohm)	low ohm resistance (about 4,5...5 Ohm)
Stereo-Tonabnehmeranschluß Stereo-pick-up-connection	2x 500 kOhm	2x 500 kOhm
Stereo-Tonbandanschluß Stereo-tape-recorder-connect.	2x 100 kOhm	2x 100 kOhm
Besonderheiten special features	8 Drucktasten, Anzeige für Höhen- und Baßregler, Sprache-Musik-Taste, Band- breitentaste, Stereotaste, Ein- knopf-Duplex-Abstimmung Stereo-Balance-Regler, UKW- Breitbanddipol	8 push buttons, visual bass and trebles control, key for speech and music, key for bandwith, single knob duplex tuning control, stereo-balance- control, key for stereo and multiplex, FM-Dipol

Lfd. Nr.	Teil part	Schaltbildangabe, Abmessungen, Werte nomenclature, measures, values	Werksbezeichnung factory number	Preis DM
34	Doppeldrehknopf (für rechte Seite) an Chassis 115(A) biknob (for right side) at chassis 115(A)		115(A).10-Tz103	2.—
35	Glasskala für: glas dial for: Chassis 411(R) Chassis 411(R) USA Chassis 115(A) Chassis 115(A) USA		411(R).10-20 411(R).c.10-20 115(A).10-106 115(A).c.10-110	6.—
36	KW-Vorkreisspule primary circuit coil for short wave	L 202	186.12-Tz 3	1.10
37	MW-Vorkreisspule primary circuit coil for BC	L 203	186.12-Tz 4	1.—
38	LW-Vorkreisspule primary circuit coil for long wave	L 207	215(R).12-Tz 15	1.—
39	KW-Oszillatospule oscillator coil for short wave	L 205	215(R).12-Tz 6	1.10
40	MW-Oszillatospule oscillator coil for BC	L 206	215(R).12-Tz 13	1.—
41	LW-Oszillatospule oscillator coil for long wave	L 208	215(R).12-Tz 14	1.—
42	KW-Anhebungsspule accentuation coil for short wave	L 204	186.12-Tz 7	—.90
43	Saugkreisspule suction circuit coil	L 201	188.12-Tz 3	1.—
44	Bandfilter band filter	BF 1	411(R).14-Tz1	9.50
45	Bandfilter band filter	BF 2	215(R).14-Tz 2	12.—
46	Bandfilter band filter	BF 3	411(R).14-Tz3	8.—
47	Abgleichkern alignment core	Bei Bestellung die dazugehörige Spule (L...) angeben if ordering, please state for which coil (L...).		—.30
48	Multiplex-Teil ohne Röhren multiplex part without tubes		215(R).16	50.50
49	19 kHz-Oszillator oscillator of 19 kc	L 606	215(R).16-Tz 1	5.—
50	38 kHz-Resonanzkreis resonance circuit of 38 kc	L 607	215(R).16-Tz 2	3.50
51	19 kHz-Resonanzkreis resonance circuit of 19 kc	L 601	215(R).16-Tz 3	2.50

Lfd. Nr.	Teil part	Schaltbildangabe, Abmessungen, Werte nomenclature, measures, values	Werksbezeichnung factory number	Preis DM
52	Bandpaßspule band pass coil	L 602	215(R).16-Tz 4	1.90
53	Bandpaßspule band pass coil	L 603	215(R).16-Tz 5	2.50
54	Bandpaßspule band pass coil	L 604	215(R).16-Tz 6	1.90
55	Bandpaßspule band pass coil	L 605	215(R).16-Tz 7	1.90
56	Antriebsrad AM drive wheel AM		MN-119/e	—.90
57	Antriebsrad FM drive wheel FM		MN-353/Ausf. I	—.90
58	Antriebsrad, verzahnt drive wheel (cog wheel)		215(R).10-15	—.30
59	Zahnrad cog wheel		215(R).10-12	—.20
60	Seilrolle rope roller		MN-117	—.05
61	Zugseil mit Federhebel rope with spring lever		411(R).10-Tz13	—.90
62	Steuerhebel control lever		215(R).10-Tz 11	—.30
63	Netzkabel mit Stecker (nur für deutsche Ausf.) mains cable with plug (for Germ. version only)		NYF ZA 2 x 0,75 mm <sup>2</sup>	2.10

**Ersatzteilliste für RF-Chassis METZ 411(R)/115 (A)**  
**Spare parts list for radio chassis METZ 411(R)/115 (A)**

Lfd. Nr.	Teil part	Schaltbildangabe, Abmessungen, Werte nomenclature, measures, values	Werksbezeichnung factory number	Preis DM
1	Selengleichrichter selenium rectifier	GI 901 B 250 C 250	kc 1,3 a 22/8—2,5	10.50
2	Germanium-Diode germanium diode	D 401, 402	A/K 5/105	3.60
3	Germanium-Diode germanium diode	D 403	A/K 5/5 M	1.80
4	Germanium-Diode germanium diode	D 601, 602	A/K 5/61	1.60
5	Feinsicherung fuse	Si 901	1,2 A träge 1,2 amps slow blow	—.24
6	Feinsicherung fuse	Si 902	0,6 A träge 0,6 amps slow blow	—.24
7	Feinsicherung fuse	Si 903	0,2 A mittelträge 0,2 amps slow blow	—.24
8	Widerstand resistor	R 507 180 Ohm/6 W	CZT 0,1,038	—.90
9	Widerstand resistor	R 508 390 Ohm/6 W	OZ 00.025	—.90
10	Widerstand resistor	R 521, 522 2,2 kOhm/2 W	ZWD 2 RWJ	—.90
11	VDR-Widerstand resistor	R 587, 588	OV 100/250 E	1.20
12	Elko electrolytic capacitor	C 561/562/563 35 $\phi$ x 75 mm	50+50+50 $\mu$ F 350/385 V BV 49 100	7.20
13	Elko electrolytic capacitor	C 551, 552 12 $\phi$ mm	8 $\mu$ F 350/385 V DIN 41332 Kl. 2	2.55
14	Niedervoltelko electrolytic low-volt capacitor	C 553, 554, 555 6,5 $\phi$ x 12 mm	25 $\mu$ F 6/8 V DIN 41332 Kl. 2	1.30
15	Niedervolt-Elko electrolytic low-volt capacitor (Lautstärke und Balance)	C 559, 560 8,5 $\phi$ x 20 mm	100 $\mu$ F 12/15 V DIN 41332 Kl. 2	2.40
16	Potentiometer potentiometer	R 596, 597, 598, 599	411(R).2-1	12.60
17	Potentiometer (Diskant) potentiometer (treble)	R 591, 592	411(R).2-2	6.—
18	Potentiometer (Baß) potentiometer (bass)	R 593, 594	411(R).2-2	6.—
19	Drehkondensator variable capacitor	C 229/230	215(R).3-1	9.—
20	UKW-Teil ohne Röhre FM-part without tube		215(R).13	28.—

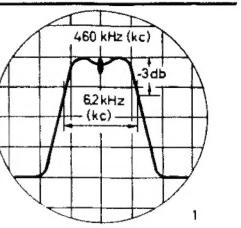
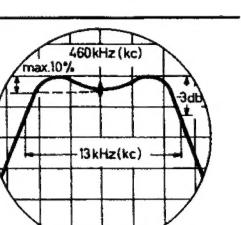
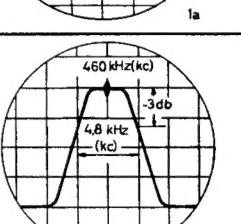
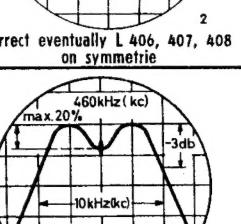
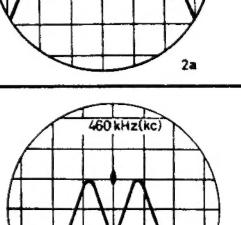
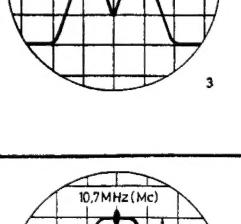
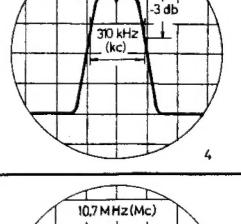
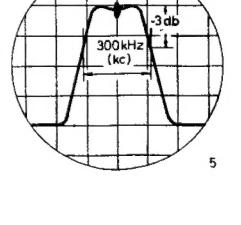
Lfd. Nr.	Teil part	Schaltbildangabe, Abmessungen, Werte nomenclature, measures, values	Werksbezeichnung factory number	Preis DM
21	Netztrafo für: Chassis 411(R) Chassis 115(A) power transformer for: Chassis 411(R) USA Chassis 115(A) USA		411(R).17-Tz1 115(A).17-Tz101	31.—
22	Ausgangsübertrager output transformer		411(R).c.17-Tz1 115(A).c.17-Tz102	27.—
23	Drucktastenaggregat für: push button unit for: Chassis 411(R) Chassis 115(A)		411(R).12-Tz1 Ausf. I 411(R). 12-Tz1 Ausf. II	52.— 52.—
24	Tastenkörper für Drucktastenaggregat Chassis 411(R) knob for push button unit		411(R).12-Tz1 Ausf. I	—.15
25	Tastenkörper für Drucktasten- aggregat Chassis 115(A) knob for push button unit chassis 115(A)		115(A).12-101	—.15
26	Zusatz-Schiebeschalter für FM-Taste booster slide switch for FM push button		215(R).12-Tz2	1.60
27	Rändelrad für Tonregler an Chassis 411(R) knurled wheel (for Bass and Treble) at chassis 411(R)		188.10-35/Ausf. II	—.35
28	Drehknopf, klein (links und rechts) an Chassis 411(R) knob, small (left and right side) at chassis 411(R)		10 832-02-132/1118 k OKW	1.20
29	Drehknopf, groß (für linke Achse) an Chassis 411(R) 8 mm Bohrung knob, big (for left axle) at chassis 411(R) 8 mm drilling		10 833-03-132/1118 k OKW	1.20
30	Drehknopf, groß (für rechte Achse) an Chassis 411(R) 6 mm Bohrung knob, big (for right axle) at chassis 411(R) 6 mm drilling		10 833-03-132/1118 k OKW	1.20
31	Rändelrad für Tonregler an Chassis 115(A) knurled wheel (for Bass and Treble) at chassis 115(A)		115 (A). 12-103	—.35
32	Drehknopf, klein (links) an Chassis 115(A) knob, small (for left side) at chassis 115(A)		115(A).10-101	—.90
33	Drehknopf, groß (für linke Achse) an Chassis 115(A) knob, big (for left axle) at chassis 115(A)		115(A).10-107	1.10

# Alignment Instructions

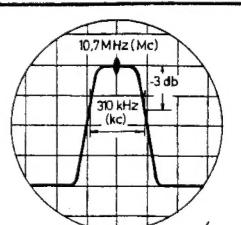
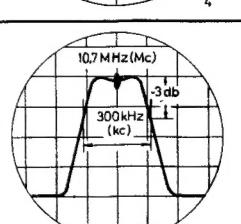
## for Radio Chassis METZ-411(R) / 115(A)

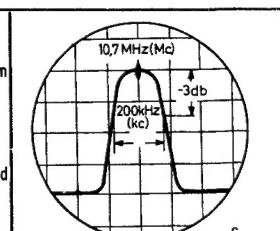
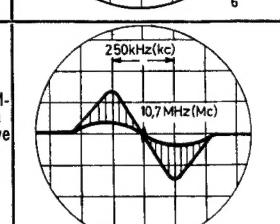
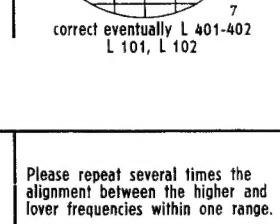
Alignment Process	Part of circuit	Setting at Receiver		Generator			Indicator Set (V-Amplifier)** (Omt-Outputmeter) (Ground connection see K 50, point 10)			Preparation of Alignment process		Tuning		Curves and Remarks	
		push button depressed	band width	Position of pointer	Setting of Frequency in Cycles	Modulation	Connections points (marked in diagram)	kind sensibility	connection	spot (marked in diagram)	procedure	Circuit (marked in diagram)	indication		

### IF-Alignment for AM- Reception (short-BC-long)

1	General	BC	small	about 1 Mc	460 Kc R <sub>1</sub> 60 Ohm	wobbl.	—	—	V	about 5 mV	over 20 k to 21	—	—	—		
2	IF-Filter after R <sub>6</sub> 402	"	"	"	"	"	BF 1 point 6	BF 1 point 9	"	"	"	L 407 L 408	detune	L 408	frequency and maximum	
3	"	"	"	"	"	"	"	"	"	"	"	L 406	detune	L 407	frequency, maximum and symmetrie	
3a	"	"	wide	"	"	"	"	"	"	"	"	L 406		L 407 L 408	correct eventually and sym.	
4	IF-Filter after R <sub>6</sub> 401	"	small	"	"	"	button contact m 2	L R <sub>6</sub> 401	"	"	"	L 405	detune	L 406	frequency and maximum	
5	"	"	"	"	"	"	"	"	"	"	"	—	—	L 405	frequency, maximum and symmetrie	
5a	"	"	wide	"	"	"	"	"	"	"	"	—	—	L 405 L 406	correct eventually and sym.	
6	Suction circuit	BC	small	about 1 Mc	460 Kc R <sub>1</sub> 60 Ohm + 400 Ohm + 200 pF	wobbl.	aerial bushing	ground bushing	V	about 5 mV	over 20 k to 21	—	—	L 201	maximum in the middle of curve	

### IF-Alignment for FM- Reception

7	IF-Alignment pass curve General	FM	—	about 90 Mc	10,7 Mc R <sub>1</sub> 60 Ohm	wobbl.	—	—	V	about 5 mV	over 20 K to 27/1	27/1-27/2	solder of connection	L 404	frequency and maximum	
8	IF-Filter after R <sub>6</sub> 402	"	—	"	"	"	BF 1 point 8	R <sub>6</sub> 402 center	"	"	"	L 403 L 402	detune	L 404	frequency and maximum	
9	"	"	—	"	"	"	"	"	"	"	"	L 402	detune	L 403	frequency, maximum and symmetrie	
10	IF-Filter after R <sub>6</sub> 401	"	—	"	"	"	button contact m 2	R <sub>6</sub> 401 center	"	"	"	L 401 L 402	detune	L 402	frequency and maximum	
11	"	"	—	"	"	"	"	"	"	"	"	L 102	detune	L 401	frequency, maximum and symmetrie	

12	IF-Filter after R <sub>6</sub> 101	—	—	"	"	"	"	"	over coupling hood to anode 2 R <sub>6</sub> 101	FM-part ground	"	"	"	L 101	detune	L 102	frequency and maximum		
13	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	L 101	"	frequency, maximum and symmetrie	
14	Ratio-Alignment	"	—	"	"	wobbl. + AM 80 %	"	"	"	"	"	over 20 k to 22	27/1 and 27/2	solder off connection	L 404	correct on symmetrie, S-curve of AM zero point in center of curve			

### HF-Alignment for FM- Reception

15	General	—	small and speed	—	Generator R <sub>1</sub> 60 Ohm	AM 30% 1 Kc	—	ground bushing	Omt	50 mW	loudsp.	—	—	—	—	—	Please repeat several times the alignment between the higher and lower frequencies within one range.
16	Osc. SW	SW	"	0 mm	5,9 Mc	"	aerial over 400 Ohm 200 p	"	"	"	"	—	L 205	frequency and maximum	0 mm corresponds to turned in variable capacitor, outmost right on the glass dial.		
17	Precircuit SW	"	"	24,5 mm	6,35 Mc	"	"	"	"	"	"	—	L 202	"	"	"	200,5 mm corresponds to turned-out variable capacitor, outmost left on the glass dial.
18	Osc. SW	"	"	200,5 mm	16,0 Mc	"	"	"	"	"	"	—	C 218	"	"	"	200,5 mm corresponds to turned-out variable capacitor, outmost left on the glass dial.
19	Precircuit SW	"	"	176,5 mm	14,8 Mc	"	"	"	"	"	"	—	C 222	"	"	"	"
20	Osc. Bc	BC	"	36,0 mm	580 Kc	"	"	"	"	"	"	—	L 206	"	"	"	"
21	Precircuit BC	"	"	36,0 mm	580 Kc	"	"	"	"	"	"	—	L 203	"	"	"	"
22	Osc. BC	"	"	177 mm	1480 Kc	"	"	"	"	"	"	—	C 220	"	"	"	"
23	Precircuit BC	"	"	177 mm	1480 Kc	"	"	"	"	"	"	—	C 224	"	"	"	"
24	Osc. LW	LW	"	0 mm	150 Kc	"	"	"	"	"	"	—	L 208	"	"	"	"
25	Precircuit LW	"	"	30,5 mm	165 Kc	"	"	"	"	"	"	—	L 207	"	"	"	"
26	Osc. LW	"	"	200,5 mm	350 Kc	"	"	"	"	"	"	—	C 228	"	"	"	"
27	Precircuit LW	"	"	176 mm	330 Kc	"	"	"	"	"	"	—	C 226	"	"	"	"

### HF-Alignment for FM- Reception

28	FM-part	FM	"	87 mm	96 Mc	40 Kc Hub 1000 cycles mod.	dipol- bushings sym. R <sub>1</sub> 300 Ohm	Omt	50 mW	loudsp.	—	C 163 C 157	frequency and maximum	—	—	—
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### Explanation

The calibration marks of the respective wave bands are being marked by points. Select amplification and HF-voltage in such a way, that a faint noise-amplitude (with 1-11 about 10% and with 12-13 about 20%) can be recognized.  
 \* — See diagram, printed circuit plate and view of the unit

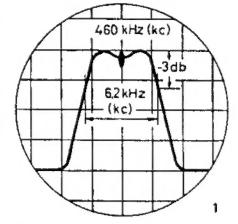
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## Abgleichanweisung

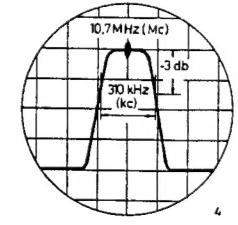
### RF-Chassis Metz 411(R); 115(A)

Abgleichvorgang	Schaltungsteil	Einstellung am Empfänger			Generator			Anzeigegerät (V-Verstärker) ** (Masseeinschluß siehe K 50, Punkt 10)			Vorbereitung des Abgleichvorganges			Abschaltung			Kurvenform und Bemerkungen:		
		Gedrückte Taste	Bandbreite	Zeigerstellung	Frequenz-einstellung (Hz)	Anschaltung (im Schaltbild bez.)	Modulation	Heiße Ende an Masse an	Art	Ort (im Schaltbild bezeichnet)	Kreis (im Schaltbild bezeichnet)	Art	Ort (im Schaltbild bezeichnet)	Anzeige					

#### ZF-Abgleich für AM-Empfang

1	Allgemein	MW	schmal	ca. 1 MHz	460 kHz R <sub>1</sub> 60 Ohm	wobbl.	—	—	V	ca. 5mV	über 20k an 21	—	—	—	—	
2	ZF-Filter nach Rö 402	—	—	—	—	—	BF 1 Punkt 6	BF 1 Punkt 9	—	—	—	L 407	L 408	verstimmen	L 408	Frequenz u. Max.
3	—	—	—	—	—	—	—	—	—	—	—	L 406	—	verstimmen	L 407	Frequenz, Maximum u. Symmetrie
3a	—	—	breit	—	—	—	—	—	—	—	—	L 406	—	verstimmen	L 407	ev. leicht auf Symmetrie korrigieren
4	ZF-Filter nach Rö 401	—	schmal	—	—	—	Taste Kontakt m 2	L Rö R 401	—	—	—	L 405	—	verstimmen	L 406	Frequenz u. Max.
5	—	—	—	—	—	—	—	—	—	—	—	L 405	—	—	L 405	Frequenz, Maximum u. Symmetrie
5a	—	—	breit	—	—	—	—	—	—	—	—	L 405	L 406	—	L 406	ev. leicht auf Symmetrie korrigieren
6	Saugkreis	MW	schmal	ca. 1 MHz	460 kHz R <sub>1</sub> 60 Ohm + 400 Ohm + 200 pF	wobbl.	Antenne	Erd-Budhse	V	cirka 5 mV	über 20k an 21	—	—	—	L 201	Maximum in der Kurvenmitte

#### ZF-Abgleich für FM-Empfang

7	ZF-Abgleich Allgemein	UKW	—	ca. 90MHz	10,7 MHz R <sub>1</sub> 60 Ohm	wobbl.	—	V	ca. 5mV	über 20k an 27/1	27/1-27/2	Verbindung öffnen	—	—	—	
8	ZF-Filter nach Rö 402	—	—	—	—	—	BF 1 Punkt 8	Rö 402 Mitte	—	—	—	L 403	L 402	verstimmen	L 404	Frequenz u. Max.
9	—	—	—	—	—	—	—	—	—	—	—	L 402	—	verstimmen	L 403	Frequenz, Maximum u. Symmetrie
10	ZF-Filter nach Rö 401	—	—	—	—	—	Taste Kontakt m 2	Rö 401 Mitte	—	—	—	L 401	L 102	verstimmen	L 402	Frequenz u. Max.
11	—	—	—	—	—	—	—	—	—	—	—	L 102	—	verstimmen	L 401	Frequenz, Maximum u. Symmetrie

12	ZF-Filter nach Rö 101	—	—	—	—	—	—	—	—	—	—	Ober Einkoppl. an Anode 2 Rö 101	UK-Teil Masse	—	—	L 101	verstimmen	L 102	Frequenz u. Max.	
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	L 101	—	L 101	Frequenz, Maximum u. Symmetrie	
14	Ratio-Abgleich	—	—	—	—	—	—	—	—	—	—	wobbl. + AM 80 %	—	—	—	über 20k an 22	27/1 u. 27/2	Verbindung durchlöten	L 404	auf Symmetrie korrigieren S-Kurve AM-Nulnpunkt in Kurvenmitte evtl. L 401-402, L 101, L 102 korrigieren

#### HF-Abgleich für AM-Empfang

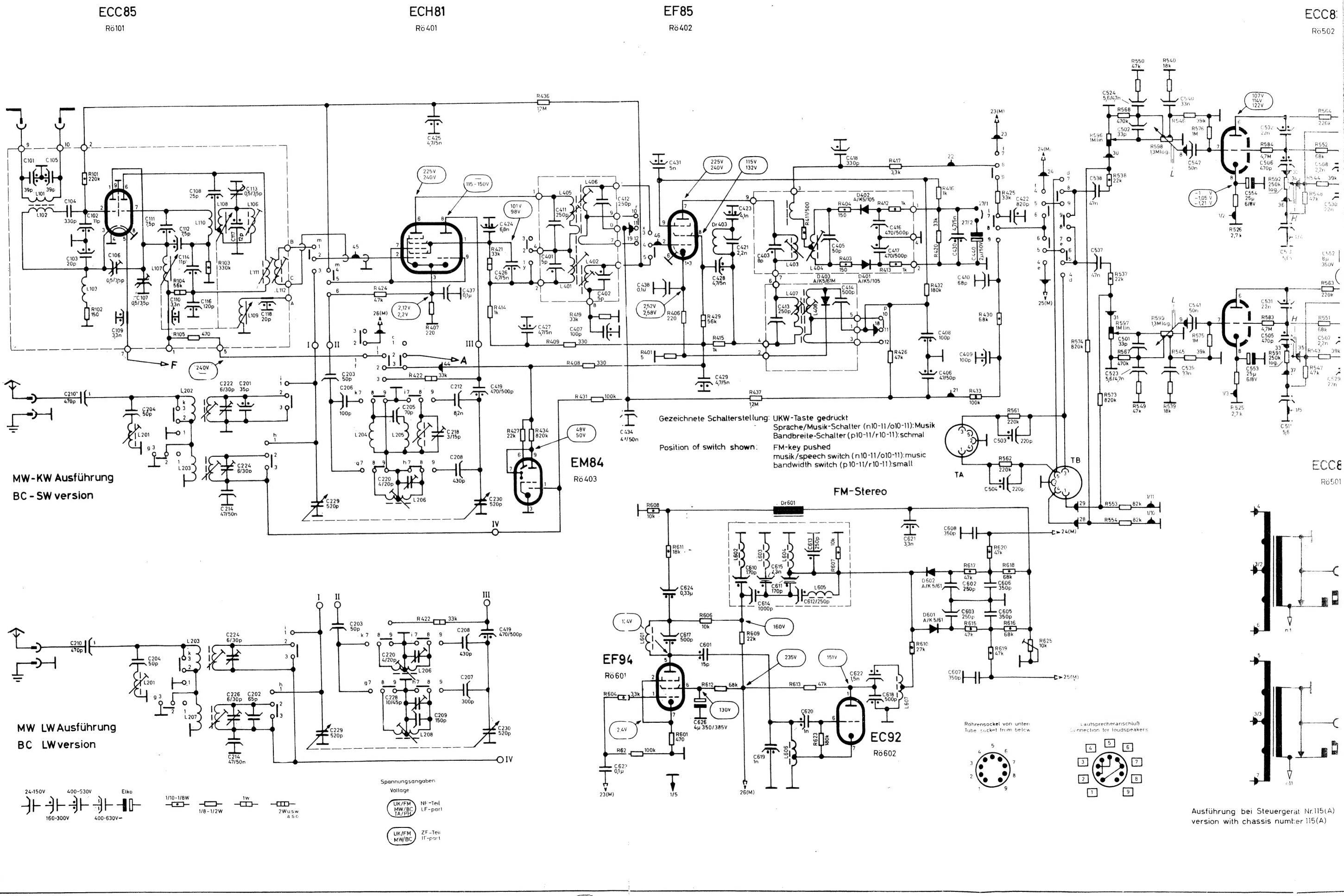
15	Allgemein	—	schmal und Sprache	—	Generator Rö 60 Ohm	AM 30% 1 kHz	—	Erd-Budhse	Out. 50 mW	Lautsp.	—	—	—	—	—	—	—	Die Abgleichvorgänge zwischen höheren und tieferen Frequenzen eines Bereiches sind mehrmals zu wiederholen
16	Osz. KW	KW	—	0 mm	5,9 MHz	—	Antenne über 400 Ohm 200 p	—	—	—	L 205	—	—	—	—	—	—	0 mm entspricht Drehko eingedreht, Skala rechter Anschlag
17	Vorkreis KW	—	—	24,5 mm	6,35 MHz	—	—	—	—	—	L 202	—	—	—	—	—	—	200,5 mm entspricht Drehko ausgedreht, Skala linker Anschlag
18	Osz. KW	—	—	200,5 mm	16 MHz	—	—	—	—	—	C 218	—	—	—	—	—	—	—
19	Vorkreis KW	—	—	176,5 mm	14,8 MHz	—	—	—	—	—	C 222	—	—	—	—	—	—	—
20	Osz. MW	MW	—	36,0 mm	580 kHz	—	—	—	—	—	L 206	—	—	—	—	—	—	—
21	VK MW	—	—	36,0 mm	580 kHz	—	—	—	—	—	L 203	—	—	—	—	—	—	—
22	Osz. MW	—	—	177 mm	1480 kHz	—	—	—	—	—	C 220	—	—	—	—	—	—	—
23	VK MW	—	—	177 mm	1480 kHz	—	—	—	—	—	C 224	—	—	—	—	—	—	—
24	Osz. LW	LW	—	0 mm	150 kHz	—	—	—	—	—	L 208	—	—	—	—	—	—	—
25	VK LW	—	—	30,5 mm	165 kHz	—	—	—	—	—	L 207	—	—	—	—	—	—	—
26	Osz. LW	—	—	200,5 mm	350 kHz	—	—	—	—	—	C 228	—	—	—	—	—	—	—
27	VK LW	—	—	176 mm	330 kHz	—	—	—	—	—	C 226	—	—	—	—	—	—	—

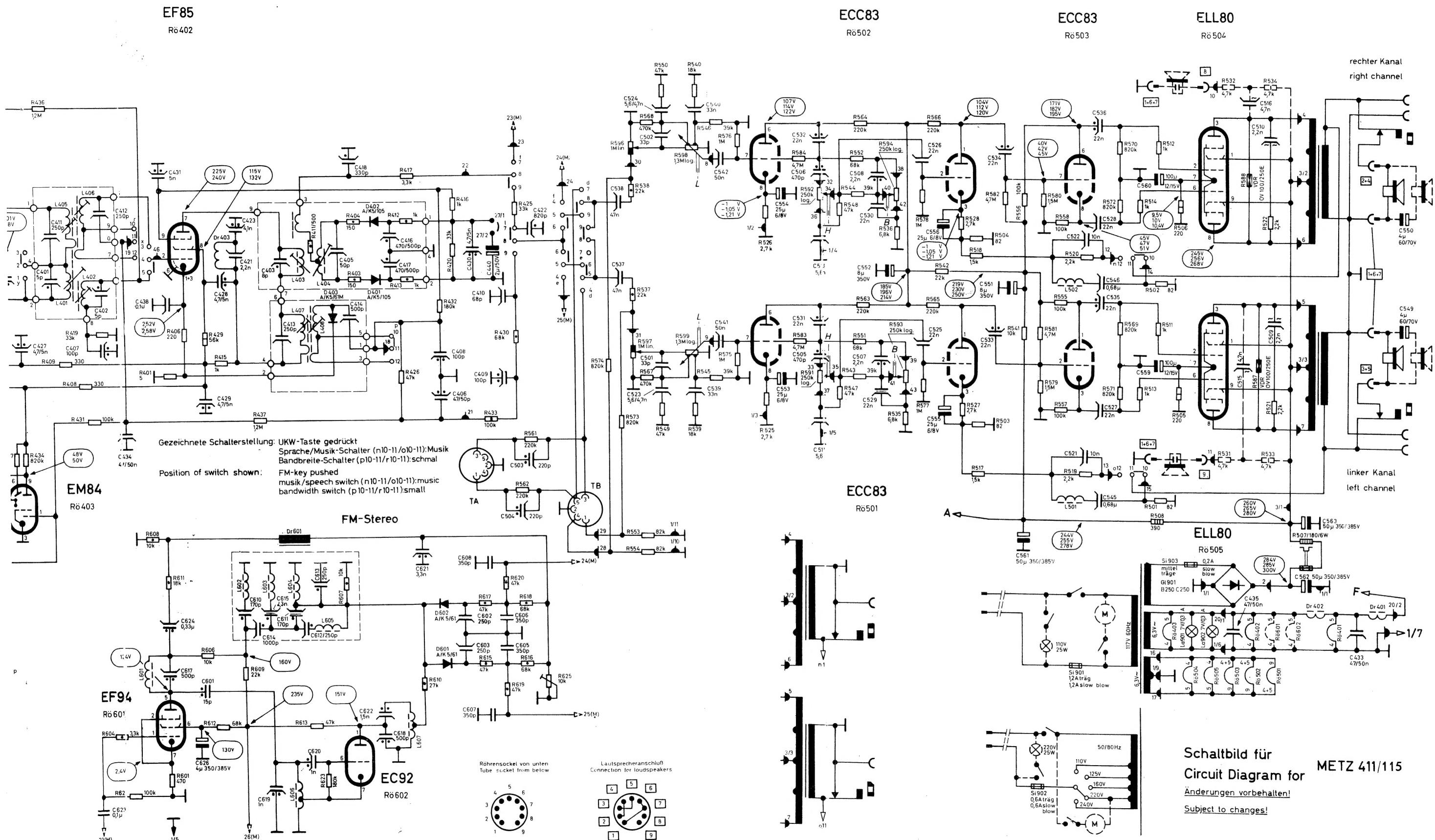
#### HF-Abgleich für FM-Empfang

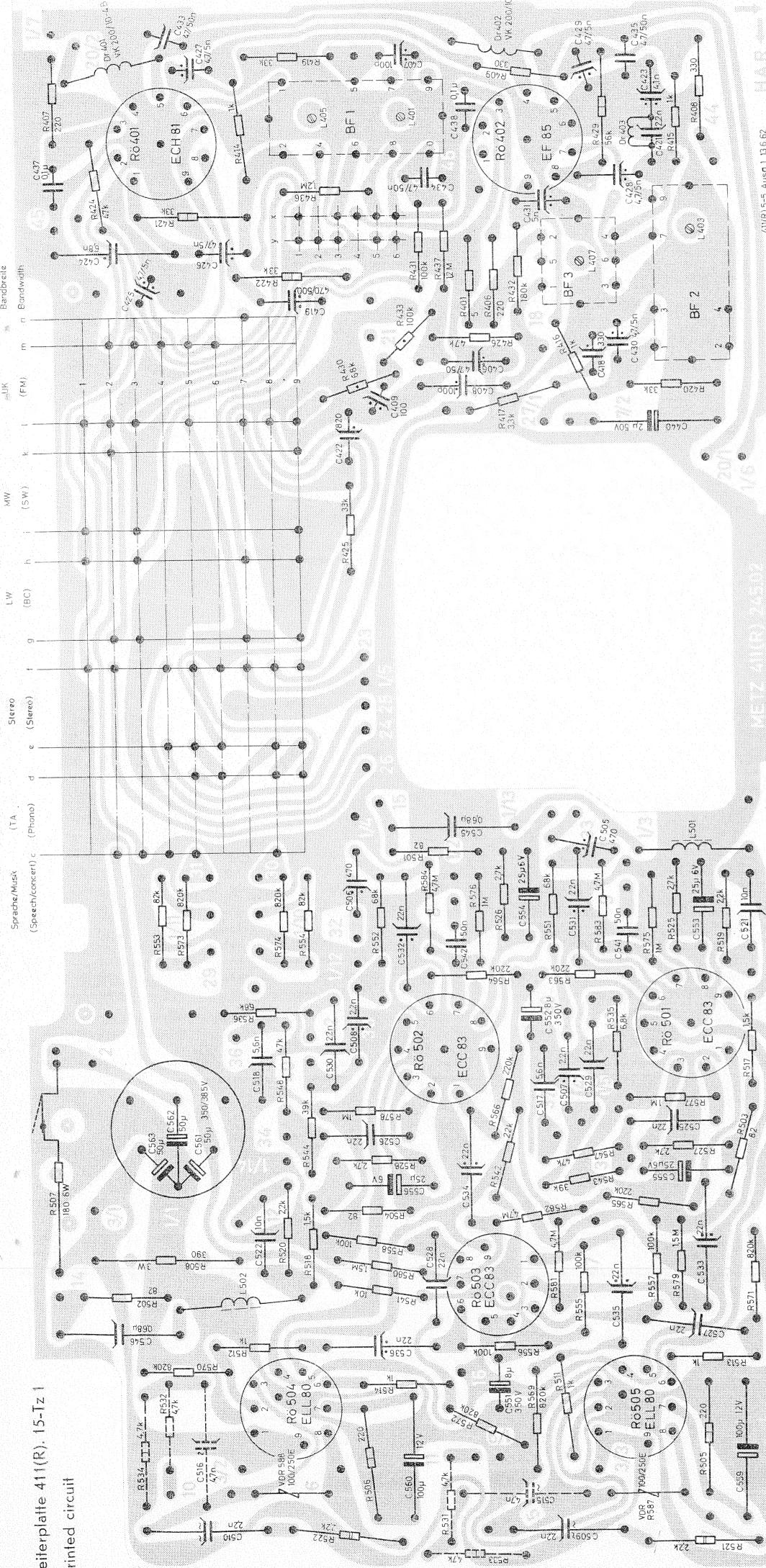
28	UK-Teil	UK	—	87 mm	96 MHz	40 kHz Hub 1000 Hz mod.	Dipolbuden sym. Ri 300 Ohm	Out. 50 mW	Lautsp.	—	C 163	C 157	Frequenz u. Max.	—	—	—	—
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#### Erklärungen

Die Eichmarken sind im jeweiligen Wellenbereich durch Punkte markiert. Verstärkung und HF-Spannung so wählen, daß schwache Rauschamplitude (bei 1-11 rund 10% bei 12-13 rund 20%) erkennbar bleibt.  
 \* — Siehe Schaltbild, Leiterplatte und Geräteansicht  
 \*\* — V-Anzeigeverstärker ggf. mit Oszilloskop Out — Outputmeter 4 Ohm 50mW

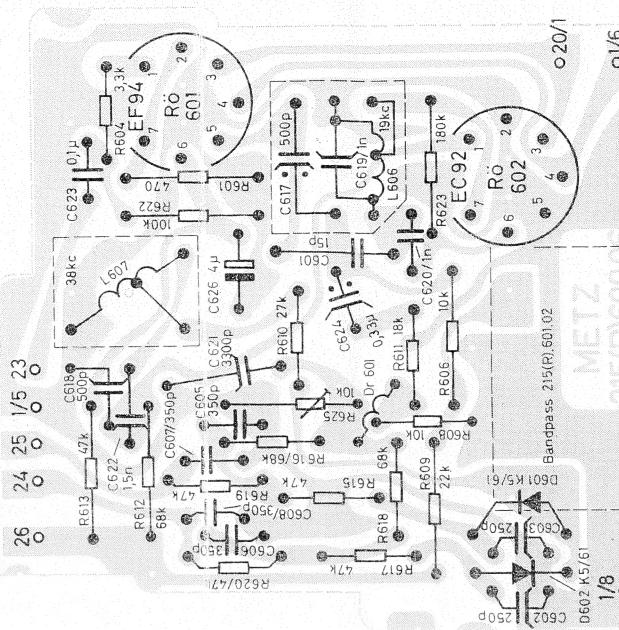




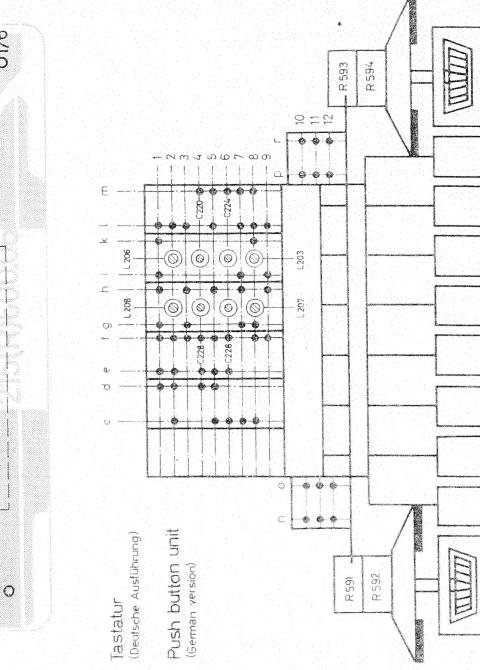


Leiterplatte 215(R) 15-Tz 3

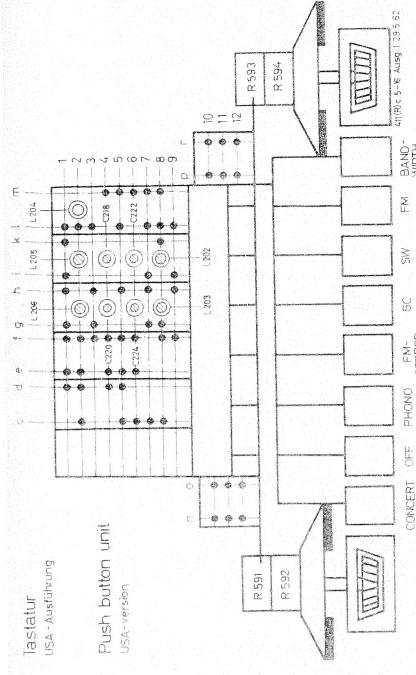
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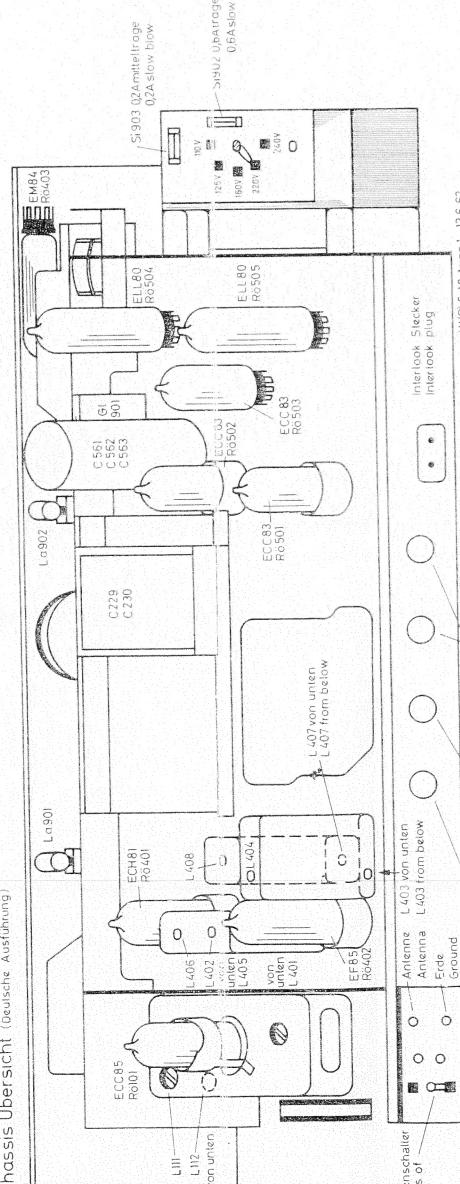


MUSIK AUS SPRACHE TA STEREO LW MW UK DAB+ BREITE

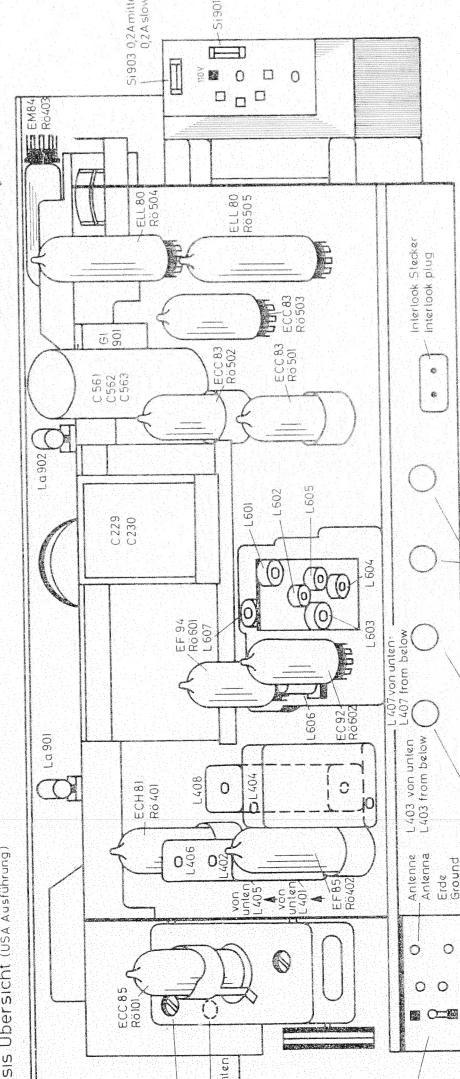


g1 1|2ECC83 g1 1|2ECC83  
Laurie Preller 4:50  
Loudspeaker 4:50  
2012

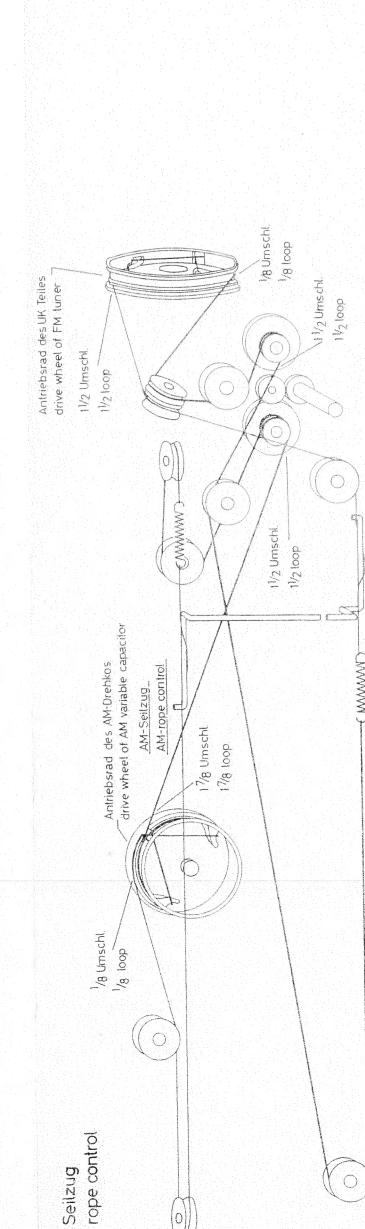
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UK BAND-BREITE



beiger am rechten Anschlag  
ned in Pointer at utmost right

WIDTH

